



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,406	07/18/2003	HanCheng Hsiung	5760-12400	5015

86942 7590 03/07/2011  
Meyertons, Hood, Kivlin, Kowert, Goetzel/Symantec  
P.O. Box 398  
Austin, TX 78767-0398

EXAMINER
----------

LU, CHARLES EDWARD

ART UNIT	PAPER NUMBER
----------	--------------

2161

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

03/07/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent\_docketing@intprop.com  
ptomhkg@gmail.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES<sup>1</sup>

---

*Ex parte* HANCHENG HSIUNG and XINYI DAVID LAI

---

Appeal 2009-007834  
Application 10/623,406  
Technology Center 2100

---

Before JAY P. LUCAS, JEAN R. HOMERE, and  
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

---

<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b).

We Reverse.

#### INVENTION

Appellants' invention on appeal is directed to a refresh mechanism for databases. (Spec. 1).

#### ILLUSTRATIVE CLAIM

Claim 1 further illustrates the invention:

1. A system, comprising:
  - one or more hosts configured to implement:
    - a production database; and
    - a refresh mechanism configured to:
      - generate a storage checkpoint of file system data of the production database;
      - generate a database clone, wherein data of the database clone comprises data from the storage checkpoint;
      - load new data to the database clone, wherein said load updates the storage checkpoint, wherein the new data is new with respect to the production database, and wherein the production database is available for access by users during said load; and
      - after said load, switch from previous file system data of the production database to the storage checkpoint to be the file system data for the production database.

### PRIOR ART

The Examiner relies upon the following references as evidence in support of the rejections:

Ishihara	US 6,636,876 B1	Oct. 21, 2003
Kampe	US 2002/0032883 A1	Mar. 14, 2002
Raman	US 2003/0217119 A1	Nov. 20, 2003

Applicant's Admitted Prior Art (AAPA), Spec. pg. 1, ll. 13-15.

### THE REJECTIONS<sup>2</sup>

1. Claims 1, 2, 5-10, 13-16, and 19-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kampe and Raman.
2. Claims 3, 11, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kampe, Raman and Ishihara.
3. Claims 4, 12, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kampe, Raman and AAPA.

### ISSUE

Based upon our review of the administrative record, we have determined that the following issue is dispositive in this appeal:

---

<sup>2</sup> The Examiner withdrew the § 112, first and second paragraph rejections set forth in the Final Office Action mailed Feb. 28, 2008. (Ans. 9-10).

Under §103, did the Examiner err by relying upon impermissible hindsight in combining the Kampe and Raman references?

#### FINDINGS OF FACT

1. Kampe describes a checkpoint as a file that contains information that describes the state of the primary component at a particular time. (paras. [0012], [0042]).
2. Appellants' Specification describes a "[a] storage checkpoint, or simply checkpoint, may be defined as a point-in-time copy or snapshot of a database." (Spec. 8, para. [0025]).

#### ANALYSIS

Appellants note at the outset that the cited Kampe reference is directed towards cluster replication using checkpoints *and makes no mention of databases, which have a specific meaning in the art.* (App. Br. 12)(emphasis added). Appellants contend that the claimed "checkpoints" are used to load data that is new with respect to the production database, as distinguished from Kampe where the checkpoints are used to maintain the current state or information for recovery. (App. Br. 13, ¶2).

On appeal, we consider Appellants' contention, *inter alia*, that the Examiner erred in combining Kampe and Raman, and therefore did not establish a *prima facie* case of obviousness under §103. (App. Br. 16-17; *see also* Reply Brief 6-7).

In particular, Appellants point out that “[i]n the present Advisory Action [mailed May 8, 2008], the Examiner asserts ‘[i]t should be noted that the combination was made so that the production database would be available during the load.’ Appellants respectfully submit that “making a combination for the sole purpose of teaching a claimed limitation is the definition of hindsight reasoning.” (App. Br. 17).

Based on our review of the record, we agree with Appellants for the reasons discussed *infra*.

Where the claimed subject matter involves more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness *must* be based on “an apparent reason to combine the known elements in the fashion claimed.” *KSR Int’l v. Teleflex, Inc.*, 550 U.S. 398, 417-18 (2007). That is, “there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, 550 U. S. at 418 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Such reasoning can be based on interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art. *KSR*, 550 U.S. at 417-18.

We are cognizant that our reviewing courts have not established a bright-line test for hindsight. However, in *KSR*, the U.S. Supreme Court stated that “[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of argument reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 421 (citing *Graham v. John Deere Co.*, 383

U.S. 1, 36 (1966)). Nevertheless, in *KSR* the Supreme Court also qualified the issue of hindsight by stating that “[r]igid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it.” *KSR*, 550 U.S. at 421.

Here, in the “Response to Arguments” section of the Answer, the Examiner proffers that “Raman explicitly states that ‘it is desired to provide uninterrupted read-only access to remote copies of a consistent file system concurrent with read-write updating of the file system’ (§ 0049). [Therefore] [i]t would have been obvious to modify the storage replica system of Kampe with the teachings of Raman.” (Ans. 13, §3). The Examiner further responds that “[t]he motivation for making the combination, to improve accessibility for data in a file system – is not only found in the above paragraph [0049] of Raman, but is also known to one of ordinary skill in the art. For example, one would make the combination to improve accessibility for data files in a replicated storage system.” (Ans. 13, §3).

As stated above, in order to support an obviousness rejection, the Examiner *must* provide some *articulated reasoning with some rational underpinning* to support the legal conclusion of obviousness. On this record, we find the weight of the evidence supports Appellants’ contention that the portion of Raman cited by the Examiner (§ 0049) does not provide an indication as to why the maintaining of file systems (as taught by Raman) applies to the primary components of Kampe, especially given the fact that Kampe does not relate to databases. (Reply Br. 6).

While the Examiner has searched for and located the keyword “checkpoint” in the Kampe reference, we note that Kampe teaches a “checkpoint” as a file that contains information that describes the state of the

primary component at a particular time. (FF 1). Looking to Appellants' specification for *context*, "[a] storage checkpoint, or simply checkpoint, may be defined as a point-in-time copy or snapshot of a database." (FF 2). Given that Appellants' "checkpoint," as claimed, is a copy of data in a database, we agree with the Appellants that the Kampe and Raman references do not fit well together in combination.

Therefore, based upon our review of the record, we are in accord with Appellants that an artisan having knowledge of cluster replicated checkpoint services would not have reasonably combined the Kampe and Raman references in the manner suggested by the Examiner *but for having the benefit of Appellants' claim to use as a guide (i.e., impermissible hindsight)*. Moreover, we find the Examiner has not fully developed the record regarding how the proposed combination "takes into account the knowledge of one of ordinary skill [in the art] at the time the invention was made, and the knowledge in the prior art." (Ans. 14).

For these reasons, we are unconvinced that an artisan would have combined the Kampe and Raman references in the manner proffered by the Examiner without having the benefit of Appellants' claimed subject matter. Therefore, we find Appellants' arguments persuasive that the Examiner erred by relying on impermissible hindsight in combining the Kampe and Raman references under § 103. Accordingly, we reverse the Examiner's rejections of claims all claims on appeal.<sup>3</sup>

---

<sup>3</sup> Kampe and Raman are the base references for each rejection on appeal.

Appeal 2009-007834  
Application 10/623,406

### CONCLUSION

Appellants have established the Examiner erred in rejecting claims 1-20 under 35 U.S.C. § 103.

### DECISION

We reverse the Examiner's decision rejecting claims 1-20.

ORDER  
REVERSED

pgc

Meyertons, Hood, Kivlin, Kowert, Goetzel/Symantec  
P.O. Box 398  
Austin, TX 78767-0398